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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/931,034	08/17/2001	Paul Grady Russell	10013958-1	2684

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HEWLETT-PACKARD COMPANY  
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P.O. Box 272400  
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EXAMINER

HASHEM, LISA

ART UNIT	PAPER NUMBER
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2645

DATE MAILED: 04/15/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/931,034

Applicant(s)

RUSSELL ET AL.

Examiner

Lisa Hashem

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 17 August 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 August 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

1. Claims 1-20 are pending in this office action.

***Drawings***

2. The proposed drawing correction and/or the proposed substitute sheets of drawings, filed on August 17, 2001 have been accepted.

***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claim 12 recites the limitation "the wireless transmitter" in line 31 on page 12. There is insufficient antecedent basis for this limitation in the claim.

5. Claim 12 recites the limitation "the wireless receiver" in lines 1-2 on page 13. There is insufficient antecedent basis for this limitation in the claim.

***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 18 and 20 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by U.S. Patent No. 6,157,298 by Garfinkel et al, hereinafter Garfinkel.

Regarding claim 18, Garfinkel discloses a helmet (see Figure 1), comprising: a protective portion for protecting a wearer's head (column 1, line 63 – column 2, line 4); a housing (column

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5, lines 1-6); a receiver for inherently receiving a wireless signal to form a received signal, said receiver positioned in said housing (column 4, line 63 – column 5, line 1); processor inherently coupled with said receiver for converting the received signal into an audio signal (column 5, lines 7-14); and one or more speakers or earphone assembly coupled with said processor, said one or more speakers converting the audio signal into an audible signal for the wearer (column 5, lines 17-21).

Regarding claim 20, the helmet of claim 18 mentioned above, wherein Garfinkel further discloses the one or more speakers are positioned near or proximate the user's ears without the one or more speakers contacting the user's ears (column 5, lines 17-21).

***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 1-6 and 8-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,157,298 by Garfinkel in view of U.S. Patent Application Publication No. 2002/0176595 by Lazzeroni et al, hereinafter Lazzeroni.

Regarding claim 1, Garfinkel discloses a portable entertainment system for use with a bicycle and a helmet, comprising: a portable computing device positionable in at least one port, the portable computing device having one or more digitized audio files thereon; a wireless transmitter coupled with the portable computing device, the wireless transmitter transmitting a digitized audio signal when the portable computing device is playing a digitized audio file

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(column 4, line 63 – column 5, line 4); a wireless receiver positioned on the helmet, the wireless receiver receiving the digitized audio signal from the wireless transmitter (column 2, lines 51-55); a processor coupled with the wireless receiver, the processor converting the digitized audio signal to an analog audio signal; and one or more speaker ear cones or earphone assembly positioned on the helmet, the one or more speaker ear cones connected with the processor for creating an audible audio signal from the analog audio signal (column 5, lines 7-24).

Garfinkel does not disclose providing a mounting device having at least one port, the mounting device adapted to connect to the bicycle.

Lazzeroni discloses a method of providing a portable entertainment system for use with a bicycle, a helmet and a portable computing device inherently having one or more digitized audio files thereon (see Abstract; column 2, section 0033, lines 21-23), the method comprising: providing a mounting device having at least one port, the mounting device adapted to connect to the bicycle at least one port adapted to receive the portable computing device (page 2, column 2, section 0033, lines 1-23).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method of Garfinkel to include a mounting device having at least one port, the mounting device adapted to connect to the bicycle as taught by Lazzeroni. One of ordinary skill in the art would have been lead to make such a modification to mount the portable computing device on the bicycle.

Regarding claim 2, the system of claim 1 mentioned above, wherein Garfinkel further discloses the mounting device includes a protective covering over the portable computing device (column 5, lines 1-6).

Regarding claim 3, the system of claim 1 mentioned above, wherein Lazzeroni further discloses the mounting device includes two ports, and the system further comprises: a GPS receiver inherently positionable in one of the two ports, the GPS receiver providing position data (page 1, column 1, section 0003, lines 1-7; page 2, column 2, section 0033, lines 1-23).

Regarding claim 4, the system of claim 3 mentioned above, wherein Lazzeroni further discloses the portable computing device is coupled with the GPS receiver to inherently receive and process the position data (page 1, column 1, section 0003, lines 1-7; page 2, column 2, section 0033, lines 1-23).

Regarding claim 5, the system of claim 1 mentioned above, wherein Lazzeroni further discloses the mounting device inherently includes a back plane connecting one or more signals from the GPS receiver with the portable computing device (see Figure 1; page 1, column 1, section 0003, lines 1-7; page 2, column 2, section 0033, lines 1-23).

Regarding claim 6, the system of claim 1 mentioned above, wherein Lazzeroni further discloses the mounting device includes two ports, and the system further comprises: a cellular phone positionable in one of the two ports, the cellular phone providing a phone audio signal to the mounting device (page 2, column 2, section 0033, lines 1-23).

Regarding claim 8, the system of claim 1 mentioned above, wherein Garfinkel further discloses the wireless transmitter inherently transmits the digitized audio signal as an infrared signal (column 2, lines 51-55; column 5, lines 14-24).

Regarding claim 9, the system of claim 1 mentioned above, wherein Garfinkel further discloses the wireless transmitter inherently transmits the digitized audio signal as a digital radio signal (column 2, lines 51-55; column 5, lines 14-24).

Regarding claim 10, the system of claim 1 mentioned above, wherein Garfinkel further discloses the one or more speaker ear cones are positioned on the helmet near the user's ears without the one or more speaker ear cones contacting the user's ears (column 5, lines 17-21).

Regarding claim 11, the system of claim 1 mentioned above, wherein Garfinkel further discloses the wireless receiver is positioned on the rear end of the helmet to receive the digitized audio signal from the wireless transmitter (Figure 1, 21; column 2, lines 51-55).

Garfinkel in view of Lazzeroni do not disclose the wireless receiver is positioned about a front portion of the helmet.

Garfinkel discloses a front of the outer shell of the helmet comprises a headlight to illuminate dark areas in the user's field of vision (column 1, lines 57-62; column 2, lines 9-13). The wireless receiver is positioned along the rear portion of the outer shell because that is larger than the front portion in order to accommodate said receiver.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method of Garfinkel in view of Lazzeroni to include the wireless receiver positioned about a front portion of the helmet to accommodate signal transmission. One of ordinary skill in the art would have been lead to make such a modification if the helmet did not include a headlight to illuminate a user's vision as disclosed in Garfinkel.

10. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,157,298 by Garfinkel in view of U.S. Patent Application Publication No. 2002/0176595 by Lazzeroni et al, hereinafter Lazzeroni, as applied to claim 1 mentioned above, and further in view of U.S. Patent No. 6,142,913 by Ewert.

Regarding claim 7, the system of claim 1 mentioned above, Lazzeroni further discloses the mounting device includes two ports (page 2, column 2, section 0033, lines 1-23).

Garfinkel in view of Lazzeroni do not disclose the system further comprises: a wheel sensor providing wheel speed to the portable computing device.

Ewert discloses an interactive exercise video system which utilizes a bicycle, a bicycle wheel speed detector, an interface unit connected to the wheel speed detector, and a conventional game controller (see Abstract). The wheel sensor provides wheel speed to a CPU (column 9, line 9 – column 9, line 67).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method of Garfinkel in view of Lazzeroni to include a wheel sensor providing wheel speed as taught by Ewert. One of ordinary skill in the art would have been lead to make such a modification since a wheel sensor can provide wheel speed to a CPU in order to process a certain operation.

11. Claims 12-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,157,298 by Garfinkel in view of U.S. Patent Application Publication No. 2002/0176595 by Lazzeroni et al, hereinafter Lazzeroni.

Regarding claim 12, Garfinkel discloses a portable entertainment system for use with a bicycle and a helmet (see Abstract), comprising: a portable computing device positionable in at least one port, the portable computing device having one or more digitized audio files thereon (column 3, lines 20-25); a first wireless transceiver coupled with the portable computing device, the wireless transmitter transmitting a digitized audio signal when the portable computing device is playing a digitized audio file (column 4, line 63 – column 5, line 4); a second wireless



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transceiver positioned on the helmet, the wireless receiver receiving the digitized audio signal from the wireless transmitter; a processor coupled with the wireless receiver (column 2, lines 51-55), the processor inherently converting the digitized audio signal to an analog audio signal; and one or more speaker ear cones positioned on the helmet, the one or more speaker ear cones connected with the processor for creating an audible audio signal from the analog audio signal (column 5, lines 7-24).

Garfinkel does not disclose providing a mounting device having at least one port, the mounting device adapted to connect to the bicycle.

Lazzeroni discloses a method of providing a portable entertainment system for use with a bicycle, a helmet and a portable computing device inherently having one or more digitized audio files thereon (see Abstract; column 2, section 0033, lines 21-23), the method comprising: providing a mounting device having at least one port, the mounting device adapted to connect to the bicycle at least one port adapted to receive the portable computing device (page 2, column 2, section 0033, lines 1-23).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method of Garfinkel to include a mounting device having at least one port, the mounting device adapted to connect to the bicycle as taught by Lazzeroni. One of ordinary skill in the art would have been lead to make such a modification to mount the portable computing device on the bicycle.

Regarding claim 13, the system of claim 12 mentioned above, wherein Garfinkel further discloses: a microphone coupled with the processor for receiving voice audio from a user of the helmet (column 5, lines 10-14).

Regarding claim 14, the system of claim 13 mentioned above, wherein Garfinkel further discloses the processor converts the voice audio from the microphone to a digitized voice signal, and the processor passes the digitized voice signal to the second transceiver for transmission to the first transceiver (column 5, lines 7-24).

Regarding claim 15, the system of claim 14 mentioned above, wherein Garfinkel further discloses the digitized voice signal is received by the first transceiver and converted into a control signal (column 5, lines 10-14).

12. Claims 16-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,157,298 by Garfinkel in view of U.S. Patent Application Publication No. 2002/0176595 by Lazzeroni et al, hereinafter Lazzeroni.

Regarding claim 16, Garfinkel discloses a method of providing a wireless portable entertainment system for use with a bicycle, a helmet and a portable computing device inherently having one or more digitized audio files thereon (see Abstract), the method comprising: at least one port adapted to receive the portable computing device (column 3, lines 20-25); inherently providing for a wireless transmitter to be coupled with the portable computing device, the wireless transmitter inherently transmitting a digitized audio signal when the portable computing device is playing a digitized audio file (column 4, line 63 – column 5, line 4; column 5, lines 22-24); providing a wireless receiver positioned on the helmet, the wireless receiver receiving the digitized audio signal from the wireless transmitter (column 4, line 63 – column 5, line 4); inherently providing a processor coupled with the wireless receiver, the processor converting the digitized audio signal to an analog audio signal; and providing one or more speaker ear cones

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positioned on the helmet, the one or more speaker ear cones connected with the processor for creating an audible audio signal from the analog audio signal (column 5, lines 7-21).

Garfinkel does not disclose providing a mounting device having at least one port, the mounting device adapted to connect to the bicycle.

Lazzeroni discloses a method of providing a portable entertainment system for use with a bicycle, a helmet and a portable computing device inherently having one or more digitized audio files thereon (see Abstract; column 2, section 0033, lines 21-23), the method comprising: providing a mounting device having at least one port, the mounting device adapted to connect to the bicycle at least one port adapted to receive the portable computing device (page 2, column 2, section 0033, lines 1-23).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method of Garfinkel to include a mounting device having at least one port, the mounting device adapted to connect to the bicycle as taught by Lazzeroni. One of ordinary skill in the art would have been lead to make such a modification to mount the portable computing device on the bicycle.

Regarding claim 17, the method of claim 16 mentioned above, wherein Garfinkel further discloses the one or more speakers are positioned near or proximate the user's ears without the one or more speakers contacting the user's ears (column 5, lines 17-21).

13. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,157,298 by Garfinkel as applied to claim 18 above.

Regarding claim 19, the helmet of claim 18 mentioned above, wherein Garfinkel further discloses the housing is positioned about a rear portion of the helmet (column 5, lines 1-4).

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Garfinkel does not disclose the housing is positioned about a front portion of the helmet.

Garfinkel discloses a front of the outer shell of the helmet comprises a headlight to illuminate dark areas in the user's field of vision (column 1, lines 57-62; column 2, lines 9-13). The housing comprising the electronics module is positioned along the rear portion of the outer shell because that is larger than the front portion in order to accommodate said module.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method of Garfinkel to include the housing is positioned about a front portion of the helmet to comprise the electronics module. One of ordinary skill in the art would have been lead to make such a modification if the helmet did not include a headlight to illuminate a user's vision.

#### ***Conclusion***

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

- U.S. Patent No. 5,465,421 by McCormick et al disclose a method of providing a portable entertainment system for use with a bicycle, a helmet and a portable computing device inherently having one or more digitized audio files

15. Any response to this action should be mailed to:

Commissioner of Patents and Trademarks  
Washington, D.C. 20231

**Or faxed to:**

(703) 872-9314 (for formal communications intended for entry)

**Or call:**

(703) 306-0377 (for customer service assistance)

Hand-delivered responses should be brought to: Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lisa Hashem whose telephone number is (703) 305-4302. The examiner can normally be reached on M-F 8:30-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Fan Tsang can be reached on (703) 305-4895. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-3900.

LH  
lh

April 7, 2004

FAN TSANG  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600

